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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/569,837	04/18/2006	Peter Niebling	INA-26	3427

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EXAMINER	
HANNON, THOMAS R	

ART UNIT	PAPER NUMBER
3682	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/569,837	NIEBLING ET AL.	
	Examiner	Art Unit	
	Thomas R. Hannon	3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 8, 9, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Caillaut et al. US 5,293,124.

Caillaut discloses a sealing arrangement which seals at least one radial interspace between at least one inner bearing ring (12) and at least one outer bearing ring (7), the sealing arrangement is provided with at least a first support (20, 24), the first support bearing at least one elastic seal (25); the sealing arrangement has a second support (18), the second support bearing at least one encoder (17) arranged outside the interspace, and the encoder (17) being oriented radially toward at least one sensor (19) arranged above the encoder (17) in the radially outward direction; the sealing arrangement has a dirt deflector (at 18) on the inner bearing ring, the dirt deflector and the first support being arranged such that they can be rotated relative to one another, and the seal (25) butting at least against the dirt deflector, characterized in that the encoder engages around the inner bearing ring, and in that the encoder (17) is covered fully at

least in the radial direction and at least partially in the axial direction by means of a covering element (20, 24), the covering element being rotationally fixed on one of the bearing rings.

Claims 1-4, 8, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Moretti et al. GB 2,207,470.

Moretti discloses a sealing arrangement which seals at least one radial interspace between at least one inner bearing ring (3) and at least one outer bearing ring (2), the sealing arrangement is provided with at least a first support (8b), the first support bearing at least one elastic seal (40); the sealing arrangement has a second support (9b), the second support bearing at least one encoder (18, 46) arranged outside the interspace, and the encoder being oriented radially toward at least one sensor (22) arranged above the encoder in the radially outward direction; the sealing arrangement has a dirt deflector (at 44) on the inner bearing ring, the dirt deflector and the first support being arranged such that they can be rotated relative to one another, and the seal (40) butting at least against the dirt deflector (at 45), characterized in that the encoder engages around the inner bearing ring, and in that the encoder is covered fully at least in the radial direction and at least partially in the axial direction by means of a covering element (15, 16), the covering element being rotationally fixed on one of the bearing rings.

Claims 1, 2, and 10-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Alff US 5,640,087.

Alff discloses a sealing arrangement which seals at least one radial interspace between at least one inner bearing ring (13) and at least one outer bearing ring (14), the sealing arrangement is provided with at least a first support (bracket holding 16), the first support bearing at least one elastic seal (16); the sealing arrangement has a second support (171), the second support bearing

at least one encoder (17) arranged outside the interspace, and the encoder being oriented radially toward at least one sensor (30) arranged above the encoder in the radially outward direction (Figure 7); the sealing arrangement has a dirt deflector (at 60, Figure 7) on the inner bearing ring, the dirt deflector and the first support being arranged such that they can be rotated relative to one another, and the seal (16) butting at least against the dirt deflector (at 60), characterized in that the encoder engages around the inner bearing ring, and in that the encoder is covered fully at least in the radial direction and at least partially in the axial direction by means of a covering element (60, Figure 7, near 18, covering radially, and at least partially axially), the covering element being rotationally fixed on one of the bearing rings. With respect to claims 10-15, the embodiment of Figure 7 includes all the claimed features.

Claims 1-7, 14, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Angelo et al. US 6,190,051.

Angelo discloses a sealing arrangement which seals at least one radial interspace between at least one inner bearing ring (11) and at least one outer bearing ring (10), the sealing arrangement is provided with at least a first support (14d), the first support bearing at least one elastic seal (15a); the sealing arrangement has a second support (14c), the second support bearing at least one encoder (13) arranged outside the interspace, and the encoder being oriented radially toward at least one sensor (not shown) arranged above the encoder in the radially outward direction; the sealing arrangement has a dirt deflector (16) on the inner bearing ring, the dirt deflector and the first support being arranged such that they can be rotated relative to one another, and the seal (15a) butting at least against the dirt deflector, characterized in that the encoder engages around the inner bearing ring, and in that the encoder is covered fully at least in

the radial direction and at least partially in the axial direction by means of a covering element (14), the covering element being rotationally fixed on one of the bearing rings. With respect to claim 2, the covering element 14 at least partially covers the seal 15a. With respect to claim 3, the covering element 14 is formed integrally with the first support 14d made of sheet metal. With respect to claim 4, the covering element 14 is fixed on a radially outer surface section (10a) of the outer bearing ring. With respect to claim 5, the covering element 14 is fixed on an inner surface of the outer bearing ring, through 15a. With respect to claim 6, the covering element 14 has the shape claimed. With respect to claim 7, the covering element 14 is formed integrally with the second support 14c. With respect to claims 14 and 15 the seal 15a contacts the dirt deflector axially and radially.

Claims 1, 2, and 10-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Niki JP 2003-107484.

Note particularly Figure 8.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Caillaut et al. 5,293,124, Moretti et al GB 2,207,470, Alff US 5,640,087, Angelo et al. US 6,190,051, and Niki JP 2003-107484, individually, as applied to claim 1 above, and further in view of Otto US 4,799,808.

Otto discloses a bearing seal in which seal lips define with a dirt deflector an annular cavity filled with grease. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the prior art sealing assemblies to include grease within the cavity defined by the sealing lips for the desired purpose of improving the sealing performance, as taught and suggested by Otto.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alff US 5,640,087, Angelo US 6,190,051, and Niki JP 2003-107484, individually, as applied to claim 1 above, and further in view of Ohtsuki et al. US 6,637,754.

Ohtsuki discloses a bearing sealing device in which sealing lips contact a supporting member mounted on the inner ring, or alternatively one of the sealing lips contacts the inner ring directly (Figures 23-29). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the sealing assembly of the prior art to include a sealing lip butting directly against the inner bearing ring, because this is taught and suggested by Ohtsuki as being a known alternative.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas R. Hannon whose telephone number is (571) 272-7104. The examiner can normally be reached on Monday-Thursday (8:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas R. Hannon/
Primary Examiner, Art Unit 3682